
LED Indications for the COMET ECM-20 and TRC-20

An Application Note

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Overview

The LED window on the front of an ECM-20 or TRC-20 gives the user basic information regarding system status. The decimals indicate target power status. The display codes provides failure information. Specifics are described below.

Decimals

As you face the LED window, you see four decimals beneath a code. Both the far left and left center decimals are updated every 100 ms. The decimals indicate:

- Far left decimal (1) – if illuminated, target power is on
- Left center decimal (2) – if illuminated, target has been reset
- Right center decimal (3) – blinks if no target power detected or target is being reset during target acquisition
- Far right decimal (4) – (not used)

Display Codes

Codes 00 through 0F are reserved for secondary failure information codes.

10	Start invalidate of cached assets
11	Start minimal save state
12	Start additional (full) save state; ECX,EDX,EAX,EIP
13	Start save & modify segment registers
14	Start save of general and other assets
15-16	- Not Used -
17	Start clear of Debug regs & Debug Mode control MSRs
18	End of acquire CPU
19	- Not Used -
1A	Start of minimal restore state
1B-1D	- Not Used -
1E	End of release CPU
1F	End of release target
20	Start of erase flash boot segment
21	Start of erase flash code 1 segment
22	Start of erase flash code 2 segment
23	Start of erase flash config data 1 segment
24	Start of erase flash config data 2 segment

25	Start of erase flash log 1 segment
26	Start of erase flash log 2 segment
27	Start of erase flash protected config segment
28	Start of loading default protected config data
29	Start of writing protected config data segment
2A	Start of loading config data
2B	Start of writing config data 2 segment
2C	Start of writing config data 1 segment
2D	End of flash initialization
2E	- <i>Not Used</i> -
2F	Attempt to reflash with invalid (pre 3.10.00) image
30	Target JTAG chain topology invalid (TGI w/CPU's + ITP w/CPU's)
31	JTAG shifter starting with a bong command
32	- <i>Not Used</i> -
33	Target JTAG chain failed tests
34-37	- <i>Not Used</i> -
38	At least one CPU did not enter Debug Mode
39	- <i>Not Used</i> -
3A-3F	- <i>Not Used</i> -
40	FPGA (10K50) already programmed, Boot code preset for display
41	FPGA (10K50) programming failed
42	Target state change caused interrupt, action routine not called
43	Trace board FPGA/CPLD programming started
44	Zlib uncompress returned an error - image defective
45	Cannot ID trace board - bad JTAG/unknown board
46	JTAG tests failed on AA trace board
47	FPGA (10Kxx/Orca) programming failed
48	7128 Image size incorrect
49	PLD (7128) erase failed
4A	PLD (7128) programming failed
4B-4F	- <i>Not Used</i> -
50-59	- <i>Not Used</i> -
5A-5F	- <i>Not Used</i> -
60-69	- <i>Not Used</i> -
6A-6F	- <i>Not Used</i> -
70	Invalid schema index detected in init

71	- <i>Not Used</i> -
72	Write of asset attempted when not dirty or not cached
73	Schema error - must have p3 = 0
74-75	- <i>Not Used</i> -
76	Error writing dirty cached asset during release CPU
77-79	- <i>Not Used</i> -
7A-7F	- <i>Not Used</i> -
80	No matching IR length for non-auto sniff JTAG
81	- <i>Not Used</i> -
82	All CPUs in target not matching type
83	At least one CPU not in Debug Mode after BreakMode inst
84	Method invalid for generic target type
85-89	- <i>Not Used</i> -
8A-8E	- <i>Not Used</i> -
8F	JTAG shifter crash - log has crash code
90-99	- <i>Not Used</i> -
9A-9F	- <i>Not Used</i> -
AA	Waiting for RESET# from target
B0	MAC address not set - must set ECM s/n
B1	MAC address has default value - must set ECM s/n
B2	IP address or netmask or gateway has default - run confice
B3	ECM waiting for IP address assignment from DHCP server
B4-B5	- <i>Not Used</i> -
B6	Waiting for step to complete
B7	Still waiting for step to complete
B8	The time to wait for the step to complete has expired
B9	- <i>Not Used</i> -
BA-BF	- <i>Not Used</i> -
C0-C9	- <i>Not Used</i> -
CA-CF	- <i>Not Used</i> -
D0-D9	- <i>Not Used</i> -
DA-DF	- <i>Not Used</i> -
E0	Cannot create MQX log component
E1	Cannot create MQX kernel log

E2	Cannot create MQX ECM-WinDB message log
E3	Cannot create ECM error log
E4	Cannot create ECM shifter log
E5	Cannot create RTCS component
E6	Cannot create Ethernet component
E7	Cannot add Ethernet interface to pool
E8	Cannot bind IP address to Ethernet controller
E9	- <i>Not Used</i> -
EA	Cannot create serial (config or debug) task
EB	Cannot create Ethernet (echo, telnet, WinDB server) task
EC-ED	- <i>Not Used</i> -
EE	Generic ASSERT condition false - use SDS to debug
EF	- <i>Not Used</i> -
F0-F9	- <i>Not Used</i> -
FA-FF	- <i>Not Used</i> -



14811 Myford Road
 Tustin, CA 92780
 Voice: 714-731-1661
 Fax: 714-731-6344
 Web: www.arium.com
 E-mail: info@arium.com

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